Dairy Geographical Information System (i-DGIS) for





Milk Unions & Federations

KAPASAN CHITTAURGARE

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BEADESAR

NIMBAHER

DUNGLA

BARI SADRI

CHEOTI SADRI

COVERAGE VBMPS

* Proposed

PRATARGARE

ARNOD

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 Milk Unions/Federations operate in large geographical areas with <u>multiple activities</u> which is spread across <u>many village locations</u>.

• i-DGIS can help in proper identification of these villages on digital map with village census code. It can be used as a readily available platform on the internet, for showing proposed and active villages in the milkshed area covered by Milk Union/Federation.



• Most importantly, i-DGIS can be used as a strong visualization tool, for monitoring & planning of activities of the Milk Union/Federation, as human census, livestock census & landuse/landcover of the village is integrated and provided in ONE place on the digital map.

i-DGIS: Village Level data in one location

Milk Union has initiated a "re-vegetation" activity of a fodder development programme in this village.



Village:

Gogave,

Tehsil:

Sahuwadi

District:

Satellite Image



Landuse/Landcover Image

Kolhapur

(Maharashtra)

Households: 373

Population: 1809 Cultivators: 616 Agricultural Labourers: 14

Buffaloes: 205

Xbred Cows: 117

Village Area: 764 (hectares)

Cultivated Area: 715
Irrigated Area: 23

Culturable Wasteland: 11

Builtup,Urban

Agriculture,Crop land

Agriculture,Fallow

Forest.Scrub Forest

Barren/unculturable/Wastelands,Scrub land

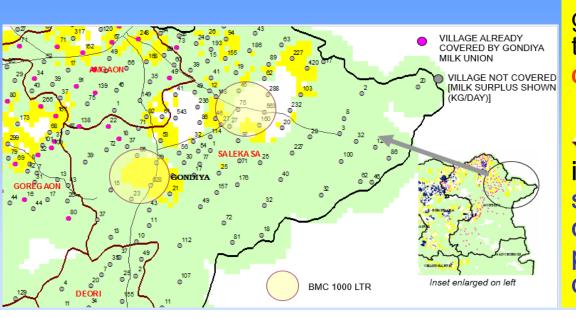
Barren/unculturable/Wastelands,Barren rocky

Wetlands/Water Bodies,River/Stram/Canals





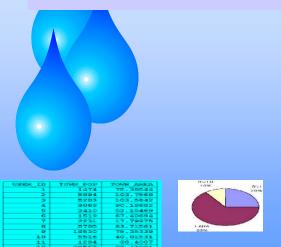
★ Knowing the location of the village on a digital map, where any specific dairy development activity is already taking place or is proposed e.g. milk procurement, ration balancing, fodder development, artificial insemination etc would help in convergence planning among multiple stakeholders.



- →Integration of attribute data and graphical information in i-DGIS results in the ability to turn a tremendous amount of data into usable information.
- →The resulting useable information of i-DGIS, facilitates decision making and spatial analysis through the use of visual display tools, in a way that would not be possible utilizing ordinary computer displays and printouts.

What can i-DGIS do that other information systems cannot?

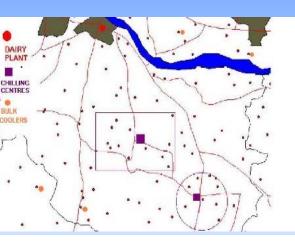




"Show the target vs achievement of villages covered in the FY 2013-14".

This is a simple query operation that can be accomplished using any database or spreadsheet program. However, spreadsheets/databases only show us the numbers in a table or proportions in a pie diagram.

We can clearly differentiate the best performers since their numbers are higher and therefore they are located at the top of the table or have a larger slice of the pie diagram.

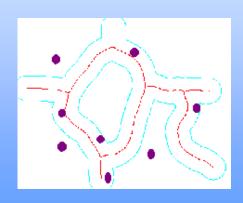


However, we can not tell where these villages are, how close are they to one another, how close are they to other infrastructural locations such as chilling centres, BMCs, Al Centres, dairy plants, roads, streams etc and the landuse patterns in these villages that may also have contributed to their success.

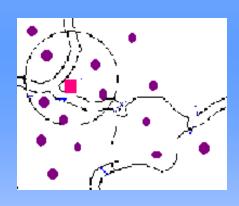


i-DGIS: a strong visualization tool





Which are the villages that lie within 2-3 Km of either side of this road? Can some of these villages with dairy potential become part of our program by extending the existing milk route?



How many villages, say within a radius of 3 km, can we cover if the BMC is set up in this village? What is the combined breedable bovine livestock population in these villages?





Which villages have been already covered under Village Based Milk Procurement System (VBMPS)? What is the scope of enhancing the coverage areas?



Steps for starting the utilization of i-DGIS



- 1. NDDB conducts an initial introductory 2 day field level, handholding workshop in State Capitals/Federation Headquarters or any mutually convenient & suitable venue with necessary facilities, attended by 2 representatives from each Milk Unions/Federation of the State.
- 2. Process of identification of active villages by the Milk Unions is explained through **i-DGIS** platform & GPS and/or Mobile Handsets (whenever required) in the workshop.
- 3. Milk Unions/Federation learn how to fill in a simple excel based template, for providing the list of active or covered villages with their census village code information on a quarterly basis.
- 4. NDDB provides continuous support over phone, e-mail and also by periodic refresher training at Anand for use of i-DGIS.

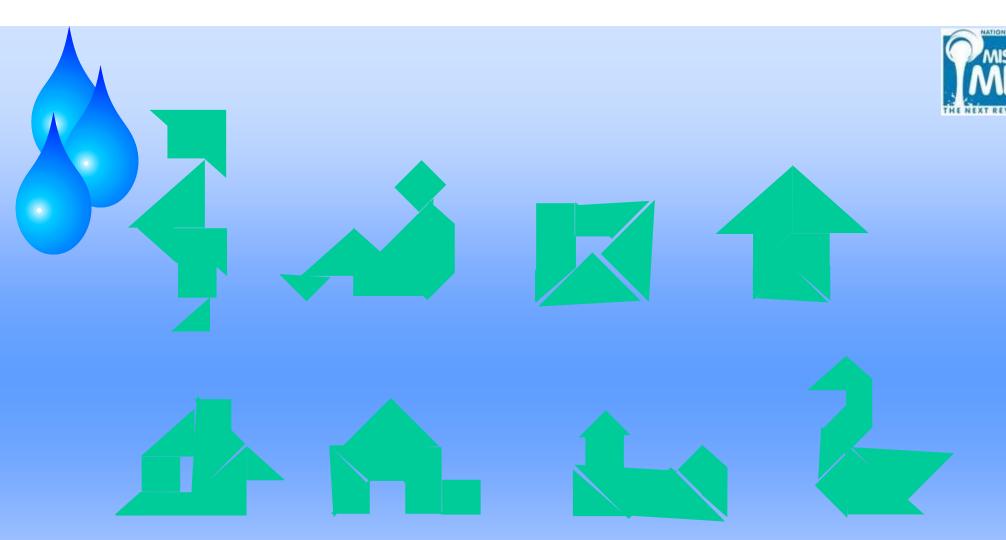


Demonstration of the i-DGIS





- Now, we will demonstrate the functioning of the i-DGIS and also show how it can be used as a tool for decision making.
- i-DGIS contains locational (centroids & boundaries) and attribute information (human census, livestock census & landuse/landcover) of over 5 Lakh villages out of approximately 6 Lakh inhabited villages in the country, (which includes all villages in the major milk producing States of the country) along with all towns & cities, as per Census of India
- Participation of the Milk Unions/Federation by <u>sharing locational data of the villages covered by them, on a regular basis</u>, will add tremendous value to the i-DGIS geospatial database and towards building up information system for organised dairy development in the co-operative sector.



Thank You!